

## Message Text

LIMITED OFFICIAL USE

PAGE 01 PARIS 25934 071633Z  
ACTION OES-07

INFO OCT-01 EUR-12 ISO-00 FEA-01 ACDA-07 CIAE-00  
INR-07 IO-13 L-03 NSAE-00 NSC-05 EB-08 NRC-05  
DODE-00 ERDA-05 SS-15 SP-02 /091 W  
-----130665 072207Z /63

R 071626Z SEP 77  
FM AMEMBASSY PARIS  
TO SECSTATE WASHDC 8222  
INFO ERDA WASHDC  
ERDA GERMANTOWN MD

LIMITED OFFICIAL USE PARIS 25934

PASS OAK RIDGE LAB, OAK RIDGE, TENN FOR I. SPIEWAK;  
ERDA WASHDC FOR SIEVERING/AIA; ERDA GERMANTOWN FOR  
D. BAUER/NRA

E.O. 11652: N/A  
TAGS: FR, TECH, PARM  
SUBJECT: FRENCH TECHNICAL EFFORT ON NON-PROLIFERATION  
ISSUES

1. ADVANTAGE WAS TAKEN OF I. SPIEWAK'S (OAK RIDGE  
NATIONAL LABORATORY) PRESENCE IN PARIS TO DISCUSS  
WITH CEA THEIR CURRENT TECHNICAL NON-PROLIFERATION  
EFFORTS. CEA DISCUSSIONS WERE LED BY B. BARRE, TECH-  
NICAL ASSISTANT TO DEPUTY ADMINISTRATOR PECQUER.

ALSO PRESENT WERE M. CHABRILLAC, HEAD OF APPLIED  
MATHEMATICS AND REACTOR STUDIES IN CEA'S LWR  
DEPARTMENT, D. CHAVARDES, OFFICE OF THE DELEGUE FOR  
NUCLEAR INDUSTRIAL APPLICATIONS, AND MR. BRISBOIS, IN  
CHARGE OF HTGR AND MSR STUDIES.

2. ABOUT 100 PEOPLE (INCLUDING PART TIME PARTICIPANTS)  
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 PARIS 25934 071633Z

REPORTEDLY ARE INVOLVED IN THE ABOVE STUDIES. THIS  
EFFORT STARTED BEFORE THE SALZBURG CONFERENCE AND IS  
EXPECTED TO CONTINUE DURING THE INFCE STUDY (POSSIBLY  
AT AN INCREASED RATE). NO EXPERIMENTAL WORK IS  
INVOLVED EXCEPT FOR SOME "NEW LOOKS" AT CO-PROCESSING.  
BASIC PHILOSOPHY IS THAT FRANCE HAS NO TIME AND MUST  
PROCEED WITH ITS PROGRAM. THUS, FOCUS IS ON WHAT

COULD BE DONE TO IMPROVE NON-PROLIFERATION, WHILE PROCEEDING WITH THEIR PROGRAM WHICH AIMS AT AN LMFBR CAPACITY OF 8-10,000 MW(E) BEFORE THE YEAR 2,000. (IT APPEARS THAT ONE OF THEIR DILEMMAS IS THAT THEY BELIEVE

THAT THEY WILL NEED A CAPACITY OF 8,000 MEGAWATTS TO JUSTIFY SUFFICIENTLY LARGE FUEL CYCLE FACILITIES FOR DEMONSTRATION OF THE ECONOMIC VIABILITY OF LMFBR'S.)

3. THE MOST IMPORTANT CRITERION IN THEIR CURRENT STUDIES IS TECHNICAL FEASIBILITY. THEIR EARLY THOUGHTS ARE THAT "THERE MAY BE NO COMPLETE FIX", BUT IT MAY BE POSSIBLE TO INTRODUCE DELAYS.

4. THEIR REVIEW AND EVALUATION EFFORTS INCLUDE: (1) IMPROVED FUEL UTILIZATION IN ONCE THROUGH LWR'S; (2) LOW ENRICHMENT HTGR'S AND THEIR FORMER HTGR THORIUM CYCLE EFFORT; (3) ENERGY CENTERS; (4) BREEDERS WITH MIXED OXIDE CORES AND THORIUM BLANKETS (INVOLVING STUDIES OF A CORE WITH INTERNAL CONVERSION OF I; (5) CO-PROCESSING; (6) PRE-IRRADIATION OF FUEL AND (7) ACTINIDE DESTRUCTION IN BREEDERS.

5. THEY HAVE NO EFFORT ON HEAVY WATER REACTOR EVALUATIONS SINCE THEY CARRIED OUT EXTENSIVE EVALUATIONS OF THIS CYCLE PRIOR TO THE DECISION TO PROCEED WITH LWR'S.  
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 PARIS 25934 071633Z

THEIR CONCLUSION WAS THAT THIS CYCLE COULD NOT BE COMPETITIVE (THEY WILL DETERMINE IF SOME OF THE REPORTS ON THIS EFFORT CAN BE TRANSMITTED TO US).

6. ACCELERATOR AND OTHER ADVANCED CONCEPTS DO NOT MEET THEIR CRITERION OF TECHNICAL FEASIBILITY AND THEY PLAN NO EFFORT ON THESE EXCEPT TO FOLLOW THE EFFORTS OF OTHERS.

HARTMAN

LIMITED OFFICIAL USE

NNN

## Message Attributes

**Automatic Decaptoning:** X  
**Capture Date:** 01-Jan-1994 12:00:00 am  
**Channel Indicators:** n/a  
**Current Classification:** UNCLASSIFIED  
**Concepts:** NUCLEAR PROLIFERATION, MEETINGS  
**Control Number:** n/a  
**Copy:** SINGLE  
**Sent Date:** 07-Sep-1977 12:00:00 am  
**Decaption Date:** 01-Jan-1960 12:00:00 am  
**Decaption Note:**  
**Disposition Action:** RELEASED  
**Disposition Approved on Date:**  
**Disposition Case Number:** n/a  
**Disposition Comment:** 25 YEAR REVIEW  
**Disposition Date:** 22 May 2009  
**Disposition Event:**  
**Disposition History:** n/a  
**Disposition Reason:**  
**Disposition Remarks:**  
**Document Number:** 1977PARIS25934  
**Document Source:** CORE  
**Document Unique ID:** 00  
**Drafter:** n/a  
**Enclosure:** n/a  
**Executive Order:** N/A  
**Errors:** N/A  
**Expiration:**  
**Film Number:** D770324-0372  
**Format:** TEL  
**From:** PARIS  
**Handling Restrictions:** n/a  
**Image Path:**  
**ISecure:** 1  
**Legacy Key:** link1977/newtext/t19770990/aaaacyhu.tel  
**Line Count:** 103  
**Litigation Code IDs:**  
**Litigation Codes:**  
**Litigation History:**  
**Locator:** TEXT ON-LINE, ON MICROFILM  
**Message ID:** ef3f4a4b-c288-dd11-92da-001cc4696bcc  
**Office:** ACTION OES  
**Original Classification:** LIMITED OFFICIAL USE  
**Original Handling Restrictions:** n/a  
**Original Previous Classification:** n/a  
**Original Previous Handling Restrictions:** n/a  
**Page Count:** 2  
**Previous Channel Indicators:** n/a  
**Previous Classification:** LIMITED OFFICIAL USE  
**Previous Handling Restrictions:** n/a  
**Reference:** n/a  
**Retention:** 0  
**Review Action:** RELEASED, APPROVED  
**Review Content Flags:**  
**Review Date:** 02-Feb-2005 12:00:00 am  
**Review Event:**  
**Review Exemptions:** n/a  
**Review Media Identifier:**  
**Review Release Date:** n/a  
**Review Release Event:** n/a  
**Review Transfer Date:**  
**Review Withdrawn Fields:** n/a  
**SAS ID:** 1364765  
**Secure:** OPEN  
**Status:** NATIVE  
**Subject:** FRENCH TECHNICAL EFFORT ON NON-PROLIFERATION ISSUES  
**TAGS:** TECH, PARM, FR  
**To:** STATE  
**Type:** TE  
**vdkvgwkey:** odbc://SAS/SAS.dbo.SAS\_Docs/ef3f4a4b-c288-dd11-92da-001cc4696bcc  
**Review Markings:**  
Margaret P. Grafeld  
Declassified/Released  
US Department of State  
EO Systematic Review  
22 May 2009  
**Markings:** Margaret P. Grafeld Declassified/Released US Department of State EO Systematic Review 22 May 2009